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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,811	03/13/2001	Saburo Uehara	A-392	2890

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EXAMINER

BARAN, MARY C

ART UNIT PAPER NUMBER

2857

DATE MAILED: 05/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/805,811

Applicant(s)

UEHARA, SABURO

Examiner

Mary Kate B Baran

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The action is responsive to the Amendment filed on 21 February 2003. Claims 1-5 are pending. Claim 4 has been amended.

2. The amendments filed on 21 February 2003 are sufficient to overcome the prior 35 U.S.C. 112 2nd paragraph rejections.

Specification

3. The disclosure is objected to because the specification is replete with terms which are not clear, concise and exact. Examples of some unclear, inexact or verbose terms used in the specification are: "prescribed" and "measurement".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2-5 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Art Unit: 2857

It is not clear from the specification if the term "prescribed" is intended to mean "predetermined", whereby the skilled artisan selects a value prior to the use of the system, or "assigned", whereby a value is measured by the system and then applied to the range or threshold.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear if the term "prescribed" is intended to mean "predetermined", whereby the skilled artisan selects a value prior to the use of the system, or "assigned", whereby a value is measured by the system and then applied to the range or threshold.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohara (U.S. Patent No. 5,978,573) in view of Hendricks et al. (U.S. Patent No. 4,785,235) (hereinafter Hendricks).

Art Unit: 2857

Referring to claim 1, Ohara discloses a semiconductor device apparatus that detects a threshold within a prescribed test range for a semiconductor device based on a binary search method (see Ohara, col. 13 lines 3-7), comprising an initial value setting unit for setting either an upper-limit value or a lower-limit value of said test range as a first value (see Ohara, col. 13 lines 16-26), and the other limit value as a second value (see Ohara, col. 13 lines 16-19), and a device measuring unit for taking measurements using the binary search method (see Ohara, col. 13 lines 3-7) on said semiconductor device with the said set first value and said set second value (see Ohara, col. 13 lines 35-46). Ohara does not teach a semiconductor device testing apparatus that detects a pass/fail threshold, and setting pass or fail values.

Hendricks teaches a semiconductor device testing apparatus (see Hendricks, column 3 lines 28-32) that detects a pass/fail threshold (see Hendricks, column 5 lines 15-37) and setting pass or fail values (see Hendricks, column 4 lines 10-16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ohara to include the teachings of Hendricks because setting pass/fail values and detecting pass/fail thresholds would have allowed the skilled artisan to reduce the time needed to eliminate false results (see Hendricks, column 5 lines 35-37).

Referring to claim 2, Ohara teaches an initial value changing unit for changing at least one of said first value and said second value set by said initial value setting unit so that said test range is extended by an amount equivalent to a prescribed value (see

Art Unit: 2857

Ohara, col. 16 lines 39-42), wherein said device measuring unit performs said measuring using said first value and said second value after the value has been changed by said initial value changing unit (see Ohara, col. 13 lines 35-43). Ohara does not teach setting pass or fail values.

Hendricks teaches setting pass or fail values (see Hendricks, column 4 lines 10-16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ohara to include the teachings of Hendricks because setting pass/fail values would have allowed the skilled artisan to reduce the time needed to eliminate false results (see Hendricks, column 5 lines 35-37).

Referring to claim 3, Ohara further discloses said prescribed value is equivalent to a measurement resolution (see Ohara, col. 16 lines 39-42 and Figures 28a-c).

Referring to claim 4, Ohara discloses a method for detecting a threshold within a prescribed test range for a semiconductor device based on a binary search method (see Ohara, col. 13 lines 3-7), comprising a first step of setting either an upper-limit value of a lower-limit value of said test range as a first value and the other limit value as a second value (see Ohara, col. 13 lines 16-26), a second step of setting a measurement position in accordance with the binary search method, using said first value and said second value (see Ohara, col. 13 lines 29-31), a third step of performing a prescribed measurement on said semiconductor device at said measurement position set in said

Art Unit: 2857

second step (see Ohara, col. 13 lines 30-34), a fourth step of setting said first value equal to the measurement position set in said second step if the measurement result obtained in said third step is less than a threshold, or setting said second value equal to the measurement position set in said second step if said measurement result is greater than a threshold (see Ohara, col. 13 lines 35-43), and a fifth step of calculating a difference between said first value and said second value after a processing in said fourth step is completed (see Ohara, col. 13 lines 44-46), and giving a command to repeat the processing from said second step onward until this difference is equal to or less than a measurement resolution (see Ohara, col. 13 lines 43-47 and lines 26-29). Ohara does not teach a semiconductor device testing apparatus that detects a pass/fail threshold, and setting pass or fail values.

Hendricks teaches a semiconductor device testing apparatus (see Hendricks, column 3 lines 28-32) that detects a pass/fail threshold (see Hendricks, column 5 lines 15-37) and setting pass or fail values (see Hendricks, column 4 lines 10-16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ohara to include the teachings of Hendricks because setting pass/fail values and detecting pass/fail thresholds would have allowed the skilled artisan to reduce the time needed to eliminate false results (see Hendricks, column 5 lines 35-37).

Referring to claim 5, Ohara discloses extending said test range by an amount equivalent to a prescribed value (see Ohara, col. 16 lines 39-42), and sets said first

Art Unit: 2857

value and said second value corresponding to the upper-limit value and lower-limit value of that range (see Ohara, col. 13 lines 16-26). Ohara does not teach setting pass or fail values.

Hendricks teaches setting pass or fail values (see Hendricks, column 4 lines 10-16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ohara to include the teachings of Hendricks because setting pass/fail values would have allowed the skilled artisan to reduce the time needed to eliminate false results (see Hendricks, column 5 lines 35-37).

Response to Arguments

7. Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that Ohara does not teach a semiconductor testing device or using the binary search method to determine a pass/fail threshold. Examiner notes that Ohara does not specifically teach testing a semiconductor device or determining a pass/fail threshold, and uses Hendricks to reject these limitations (see Hendricks, column 3 lines 28-32 and column 5 lines 15-37).

Conclusion

Art Unit: 2857

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Black et al. teach a method and system for selectively disconnecting a redundant power distribution network to identify a site of a short.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Kate B Baran whose telephone number is (703) 305-4474. The examiner can normally be reached on Monday - Friday from 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S Hoff can be reached on (703) 308-1677. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

MKB
April 29, 2003


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800